

## LINCOLN CITY/LANCASTER COUNTY PLANNING STAFF REPORT

for May 10, 2006 PLANNING COMMISSION MEETING

**PROJECT #:** Special Permit #06031

**PROPOSAL:** To allow a wireless facility (monopole) up to 108' in height in the H-2 zoning district.

**WAIVERS:** Waivers to the required fall zone and landscape screening are requested.

**LOCATION:** 540 North 46<sup>th</sup> Street

**LAND AREA:** The lease area is approximately 460 square feet in area.

**CONCLUSION:** Subject to the conditions of approval, this request complies with the requirements of the Zoning Ordinance and the Comprehensive Plan.

<b>RECOMMENDATION:</b>	Conditional Approval
Waivers:	
Fall zone	Approval

### **GENERAL INFORMATION:**

**LEGAL DESCRIPTION:** Portions of Lots 11 and 12, J. G. Millers Subdivision, and a portion of vacated 46<sup>th</sup> Street right-of-way, located in the south ½ of Section 20, T10N, R7E, Lancaster County, Nebraska.

**EXISTING ZONING:** H-2 Highway Business

**EXISTING LAND USE:** Mini-storage warehousing.

### **SURROUNDING LAND USE AND ZONING:**

North:	Mini-storage warehousing	H-2
South:	Former auto sales dealership	H-2
East:	Office, retail, commercial	H-2
West:	Office, public	O-3, P

## **COMPREHENSIVE PLAN SPECIFICATIONS:**

**Page F25** - The 2025 Comprehensive Plan's Land Use Plan (as amended July, 2003) designates commercial land uses in this area.

**Page F126** - Wireless Telecommunications - The placement and construction of such facilities need to occur in a way that is compatible with the natural and built environment. Taller, more intensive facilities should be located in commercial and industrial areas. Facilities in residential areas should be unobtrusive, of a scale consistent with the neighborhood setting, and sited in a way that does not detract from the enjoyment of the neighborhood by its residents.

## **ANALYSIS:**

1. Waivers to both the fall zone and the required landscape screening are being requested. The fall zone is a requirement of the Zoning Ordinance and can be waived by the Planning Commission. The requested waiver seeks to adjust the fall zone from approximately 54' to 23'. Located mid-block, the site is at the rear of the buildings in the area and is surrounded by parking lots, parking lot driving aisles and an office building. The adjustment to the fall zone is appropriate and should not significantly impact the surrounding uses.

Landscape screening is a requirement of the Design Standards, and can be approved administratively by the Planning Director. It is not feasible to screen around the entire base of the facility because it is adjacent to an existing mini-warehouse building and paved parking areas, so some adjustment is appropriate. A portion of the site east of the monopole is not paved and could sustain some landscaping, and it should be installed. The intent of the screening standard is to both screen wireless facilities from view, and to provide additional vegetation for their aesthetic value. An adjustment to the design standard for screening should be approved to only require the number of plants that can reasonably be planted and maintained east of the monopole.

## **2. STANDARDS FOR EVALUATION:**

### **Conformity with Comprehensive Plan.**

- A. The Comprehensive Plan designates commercial land uses in this area. The Comprehensive Plan also notes that towers accommodating wireless facilities are part of the infrastructure that supports emerging wireless technologies, and are consistent with the goal of ensuring the community is served by information technology. This

application is consistent with the Plan and sites the facility in a manner that is compatible with surrounding uses.

**Preference of site location in accordance with Section 27.68.080.**

B. There are three location preferences as follows:

I. Preferred Location Sites:

(A) Publicly owned sites on which personal wireless facilities can be unobtrusively located with due regard to visibility, aesthetic issues, traffic flow, public safety, health and welfare. Such sites may include locating on existing buildings, co-locating on existing towers, screened roof-top mounts, water towers, billboards, electric substations, or other camouflaged sites, but shall not include new towers.

(B) Privately owned sites with existing structures on which personal wireless facilities can be unobtrusively located with due regard to visibility, aesthetic issues, traffic flow, public safety, health and welfare. Such sites may include locating on existing buildings, co-locating on existing towers, screened rooftop mounts, water towers, billboards, electric substations, or other camouflaged sites, but shall not include new towers.

(C) Publicly owned sites in which the facility is minimally obtrusive, has a minimal impact on the surrounding area, is an appropriate distance from residential land uses, has minimal impact on residential uses, with due regard being given to the scale of the facility and the surrounding area and the impact on the location.

(D) Sites in commercially or industrially zoned districts in which the facility is minimally obtrusive, has a minimal impact on the surrounding area, is an appropriate distance from residential land uses, has minimal impact on residential uses, with due regard being given to the scale of the facility and the surrounding area and the impact on the location.

II. Limited Preference Sites, in order of priority:

(A) Sites on other public property.

(B) Sites on other commercially or industrially zoned property.

(C) Screened antennas on multi-family residential structures exceeding 30' in height.

(D) Camouflaged structures with minimal impact on residential land uses.

III. Sensitive Location Sites. Sites located in areas with residential uses, environmentally sensitive areas, Capitol View Corridors, the Capitol Environs District,

entryway corridors, downtown, landmarks or landmark districts, properties listed or eligible to be listed on the National Register of Historic Places, the Airport Environs, and other sensitive areas. The applications for personal wireless facilities which are located at sensitive sites will be required to demonstrate a technical need to locate a personal wireless facility at a sensitive site and that other reasonable alternatives do not exist for the facility at a location which is not a sensitive site.

The proposed location is in the H-2 Highway Business district at the rear of a mini-warehouse complex, and it is considered a preferred location.

#### **Compatibility with abutting property and land uses.**

- C. The surrounding uses in this H-2 district include mini-warehousing, office, a former auto sales dealership and a restaurant. The proposed wireless facility would be appropriate on any of the lots in this H-2 area and is compatible with the existing uses.

#### **Adverse impacts such as visual, environmental or noise impacts.**

- D. The plans show flush-mounted antennas to minimize the silhouette of the facility and help minimize the visual impact of the facility. No other environmental or noise impacts are noted.

#### **Availability of suitable existing structures for antenna mounting.**

- E. LMC Section 27.68.120(d) requires a minimum separation of one-half mile between wireless facilities. The applicant was asked to provide coverage maps and a search ring to show both where coverage is needed and where a facility could be located to meet coverage requirements. The applicant was also asked to demonstrate why any other existing facilities in the area were not suitable for collocation. Of the five facilities noted in the application, only the KOLN and 3-Eagles towers are within ½ mile. The applicant attempted early in the siting process to collocate on these towers but was unable to do so because they are “live” high-power facilities and adversely affect the applicant's equipment. The existing monopoles located at South 42<sup>nd</sup> and Randolph Streets, at North 56<sup>th</sup> and P Streets, and at North 48<sup>th</sup> and Y Streets will not provide adequate coverage according to the applicant, and are also more than ½ mile away.

#### **Scale of facility in relation to surrounding land uses.**

- F. The proposed tower is located in the approximate middle of an oversized block bounded by North 45<sup>th</sup>, North 48<sup>th</sup>, R and Vine Streets. Zoned H-2, the existing uses are generally compatible with a 108' tall wireless facility. Compatibility of scale is

partially provided by siting the facility in the middle of a large block to provide separation from the surrounding streets. The KOLN and 3-Eagles towers are prominent in the background when the site is viewed from North 48<sup>th</sup> Street, as well as an existing line of power poles along the south edge of the subject property. Flush mounted antennas help to reduce the silhouette and the overall size of the facility.

**Impact on views/vistas and impact on landmark structures/districts, historically significant structures/districts, architecturally significant structures, landmark vistas or scenery and view corridors from visually obtrusive antennas and back-up equipment.**

- G. There is no significant impact noted.

**Color and finish.**

- H. The tower must have a galvanized finish as required by the LMC Section 27.68.110(c), but it is not indicated in the application. The site plan must be revised to include a note stating this.

**Ability to collocate.**

- I. The proposed tower is designed to accommodate up to three carriers as required by LMC Chapter 27.68 for a facility of this height. Additional lease areas for ground space to accommodate the additional carriers must be designated on the site plan.

**Screening potential of existing vegetation, structures and topographic features, and screening potential of proposed facilities, ground level equipment, buildings and tower base.**

- J. As noted previously, an adjustment to the required screening is requested. The potential for screening is limited given the built environment in this area, however it appears a few plants can be maintained east of the monopole which can serve to improve the aesthetics of the area.

**Evidence of good faith efforts, and demonstration that a preferred or limited preference site was not technically, legally, or economically feasible.**

- K. This wireless application is considered a preferred site. Additionally, the applicant has demonstrated there are no collocatable facilities in the area.

**CONDITIONS:**

Site Specific:

1. This approval permits a 108' tall monopole for wireless facilities capable of accommodating the antennas up to three carriers consistent with the revised site plan with a waiver to the fall zone and an adjustment to the landscape screening.

General:

2. Before receiving building permits:

- 2.1 The permittee shall complete the following instructions and submit the documents and plans to the Planning Department for review and approval.

- 2.1.1 A revised site plan including 5 copies showing the following revisions:

- 2.1.1.1 Add a note stating that the monopole will have a galvanized finish.

- 2.1.1.2 A signed surveyor's certificate and a revised legal description that includes Lot 11 and vacated North 46<sup>th</sup> Street right-of-way.

- 2.1.1.3 Include a landscape plan showing landscape screening consisting of the number of plants that can reasonably be planted and maintained east of the monopole.

- 2.1.1.4 Add the following notes:

- A. The monopole will not be lighted.

- B. All antennas shall be flush-mounted arrays.

- 2.1.1.5 Show adequately-sized lease areas for ground equipment for all three carriers.

- 2.1.1.6 Show the correct scale on the site plan.

- 2.2 The construction plans comply with the approved plans.

- 2.3 Submit a surety adequate to guarantee removal of the wireless facility subject to approval by the City.

Standard:

3. The following conditions are applicable to all requests:
- 3.1 Before use of the facility all development and construction shall have been completed in compliance with the approved plans.
  - 3.2 All privately-owned improvements shall be permanently maintained by the owner.
  - 3.3 The site plan accompanying this permit shall be the basis for all interpretations of setbacks, yards, locations of buildings, location of parking and circulation elements, and similar matters.
  - 3.4 This resolution's terms, conditions, and requirements bind and obligate the permittee, its successors and assigns.
  - 3.5 The applicant shall sign and return the letter of acceptance to the City Clerk within 30 days following the approval of the special permit, provided, however, said 30-day period may be extended up to six months by administrative amendment. The clerk shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds, filling fees therefor to be paid in advance by the applicant.

Prepared by:

---

Brian Will, 441-6362, [bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)  
Planner  
April 26, 2006

**CONTACT:** Trena Vunesky  
Dolan Realty Advisors  
7718 Forsyth Blvd  
Clayton, MO 63105  
(314) 344-2892

**APPLICANT:** Verizon Wireless  
10740 Nall Avenue Ste 400  
Overland Park, KS 66211  
(913) 344-2892

Special Permit #06031  
540 North 46<sup>th</sup> Street

Page 8

**OWNER:** Lincoln Storage  
c/o Thompson Realty Group  
2930 Ridge Line Road  
Lincoln, NE 68516  
(402) 421-7700

F:\FILES\PLANNING\PC\PERMITS\SP\06000\SP06031 Verizon 540 N 46th.bjw.wpd





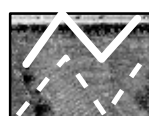
## Special Permit #06031 540 N 46th St

2005 aerial

### Zoning:

R-1 to R-8	Residential District
AG	Agricultural District
AGR	Agricultural Residential District
R-C	Residential Conservation District
O-1	Office District
O-2	Suburban Office District
O-3	Office Park District
R-T	Residential Transition District
B-1	Local Business District
B-2	Planned Neighborhood Business District
B-3	Commercial District
B-4	Lincoln Center Business District
B-5	Planned Regional Business District
H-1	Interstate Commercial District
H-2	Highway Business District
H-3	Highway Commercial District
H-4	General Commercial District
I-1	Industrial District
I-2	Industrial Park District
I-3	Employment Center District
P	Public Use District

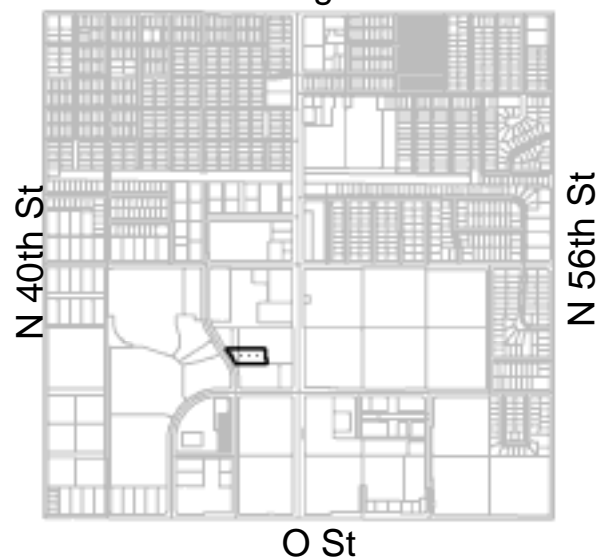
One Square Mile  
Sec. 20 T10N R07E

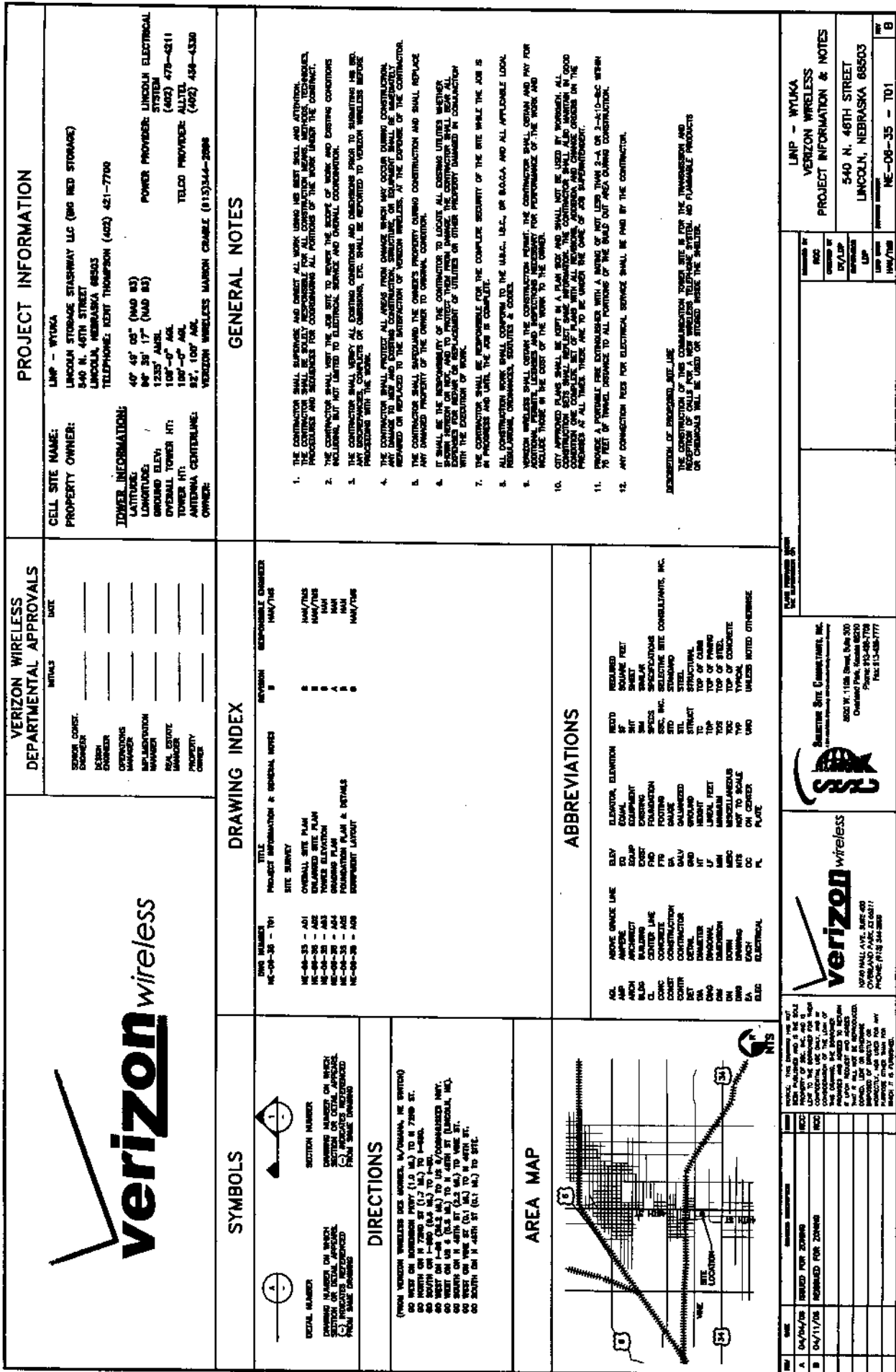


Zoning Jurisdiction Lines

City Limit Jurisdiction

Holdrege St



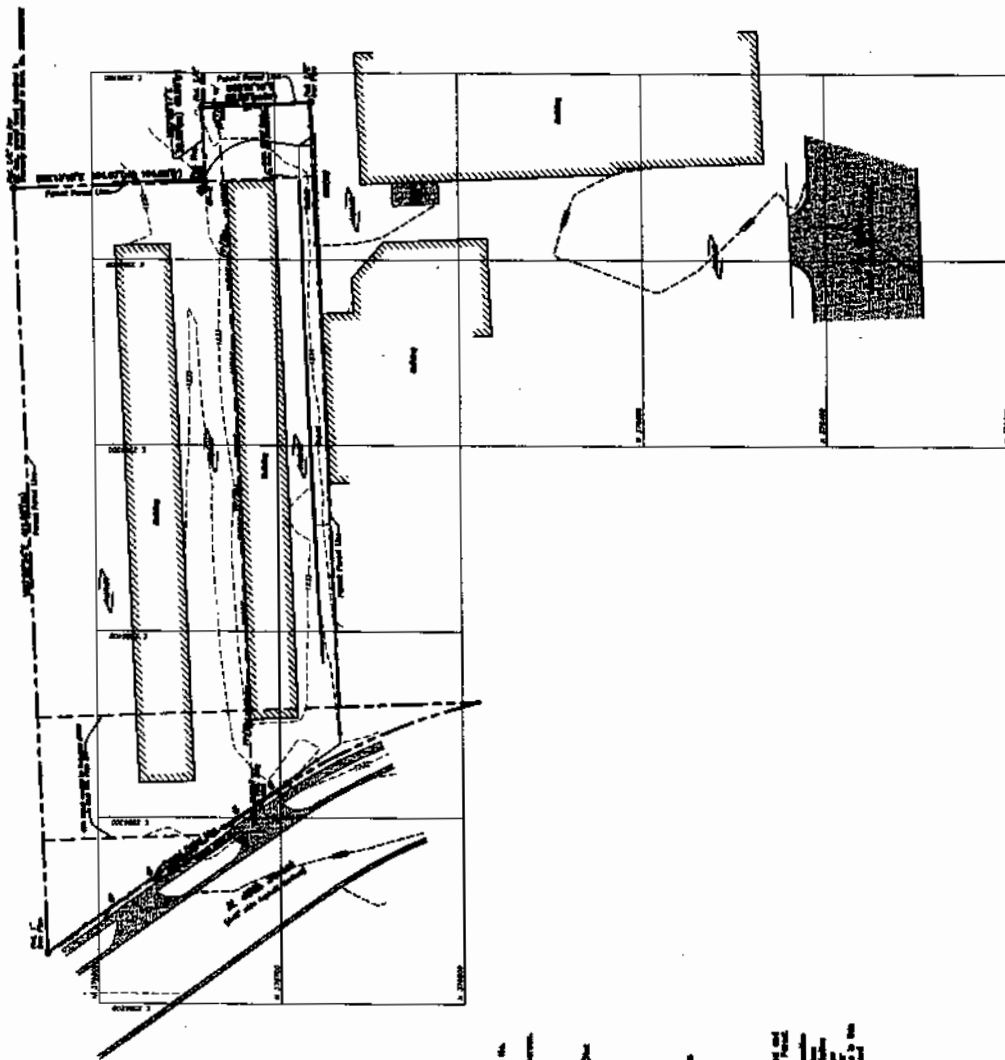


**LIHQ BTA WYUNKA**

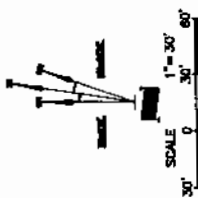
[illegible]

3

The system of the "new" law is available and already in effect. The Federal Reserve Board has issued a statement to the effect that it is a "temporary measure" and that it is "subject to change."




	_____	NAME _____
◆	_____	SCHOOL _____
◇	_____	CITY AND STATE OF ORIGIN _____ CITY AND STATE WHERE BORN _____
△	_____	ANY OTHER NAMES USED _____
♦	_____	REMARKS _____
Always	_____	FULL NAME IF AVAILABLE _____

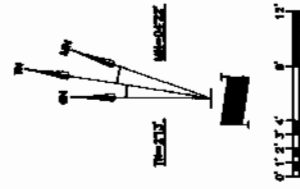


NEWSPAPER WOMAN

ARMED AND DANGEROUS

 BIDDERS HOTLINE OF NEBRASKA  
NE-REGISTRATION  
SIX Months 1-800-338-3466  
NADA Omaha 344-3583





ENLARGED SITE PLAN

**verizon** wireless  
107-60 NALL AVE. SUITE 402  
OVERLAND PARK, KS 66211  
PHONE: 913-344-9900

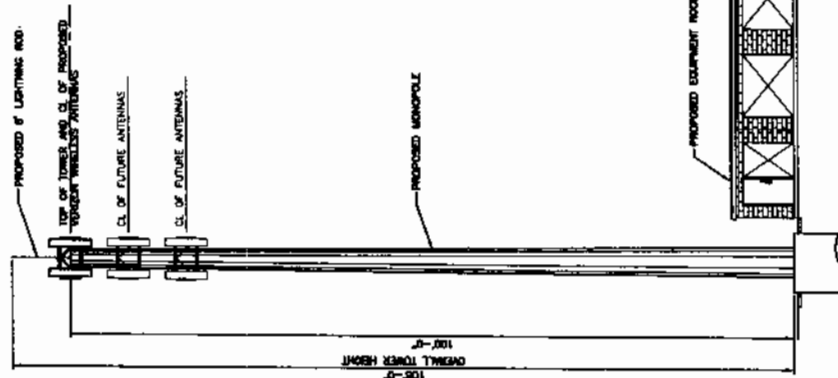
Also, the 1990s brought a new wave of interest in the "old" sciences of chemistry and physics. The American Chemical Society (ACS) and the American Physical Society (APS) both reported a significant increase in membership during the 1990s. The ACS reported a 10% increase in membership, while the APS reported a 15% increase. This was a significant achievement for both organizations, especially given the challenges they faced in the 1980s. The increase in membership was a result of a number of factors, including a renewed interest in the sciences, a focus on outreach and education, and a commitment to research and innovation. The ACS and APS both played a key role in the development of the sciences, and their continued growth is a testament to their commitment to the field.

REF	DATE	REVISION DESCRIPTION	DATE
A	04/04/04	ISSUED FOR 200404	NOI
B	04/11/04	REISSUED FOR 200410	NOI

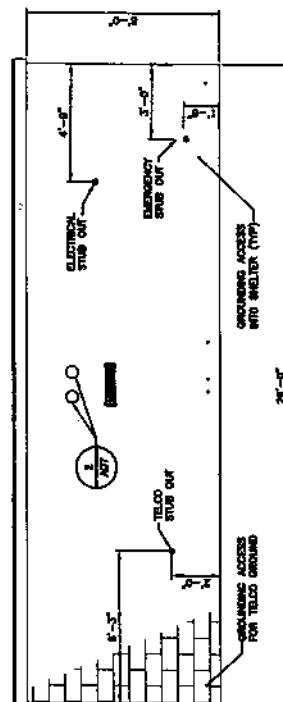
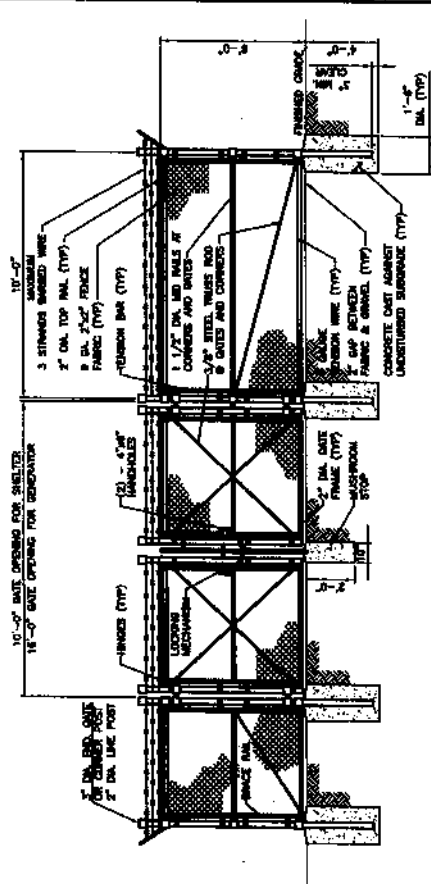
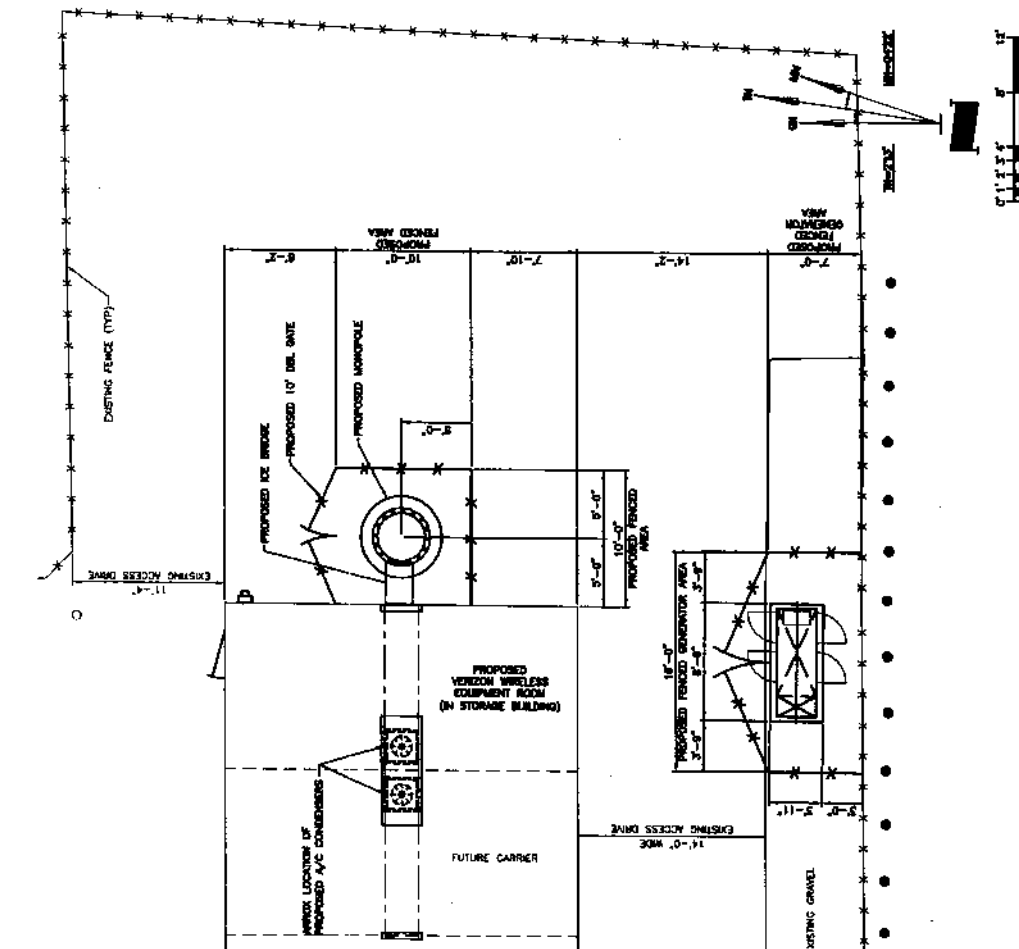
LINP - WYUKA  
VERIZON WIRELESS  
SITE PLAN

540 N. 45TH STREET  
LINCOLN, NEBRASKA 68503

REV	B
<p>REVISED NUMBER</p> <p>NE-06-35 - A02</p>	

[illegible]





## FENCE/GATE DETAIL

WATCH EXHAUST FENCE

[illegible]

VZW tower to be located behind furthest south storage shelter. VZW equipment to be located inside storage shelter.





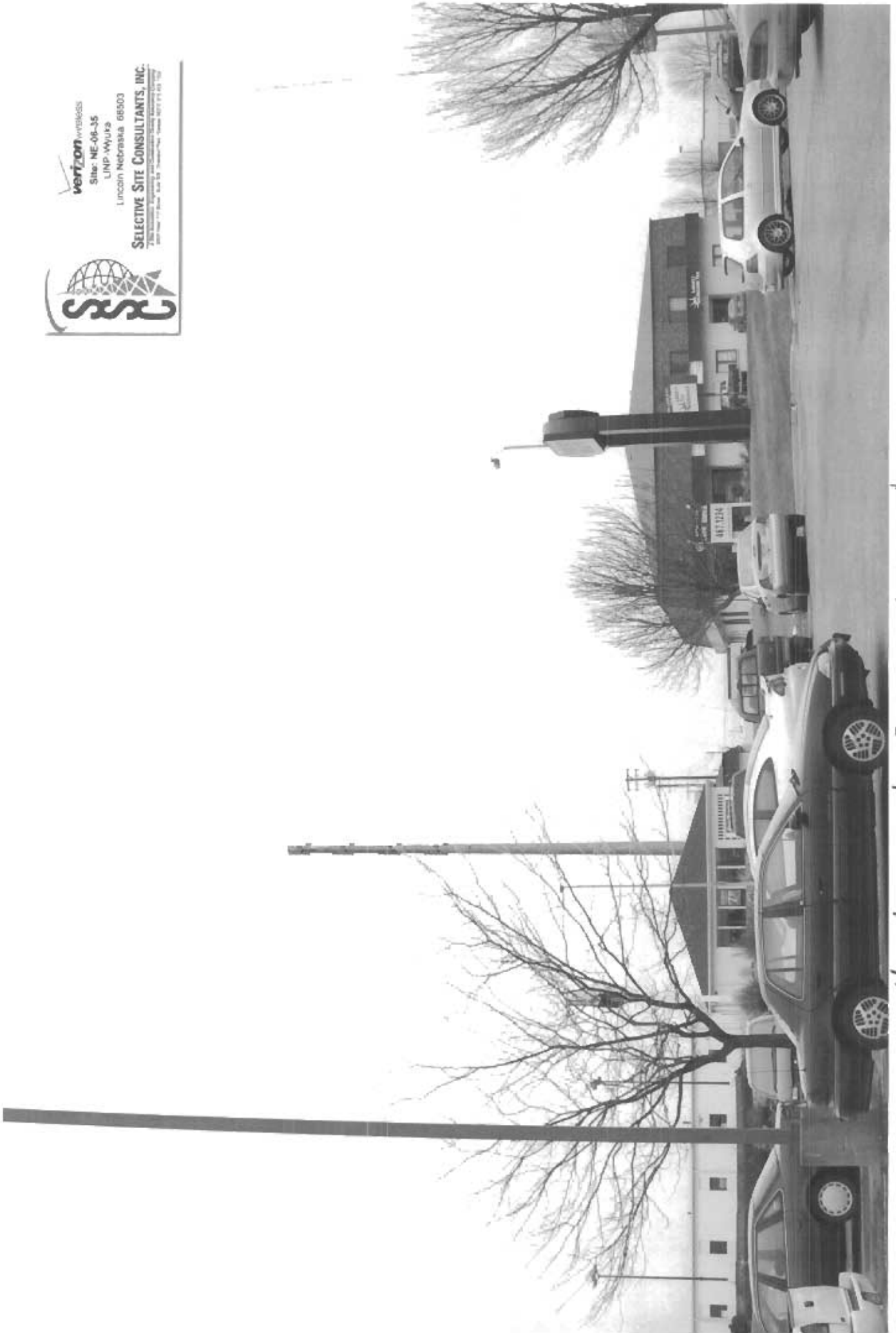


verizon WIRELESS  
Site: NE-08-35  
LMP-WYUK3

Lincoln Nebraska 68503

SELECTIVE SITE CONSULTANTS, INC.

1818 North 10th Street, Suite 100, Lincoln, NE 68503  
402-441-1111



VIEW LOOKING WEST FROM EAST OF N. 48<sup>th</sup> ST.

**Purpose Statement:**

Verizon Wireless (VAW) to build a 100' monopole with flush-mounted antennas and construct an equipment shelter in the existing storage sheds. VZW will comply with the City of Lincoln telecommunication ordinance and design the tower to hold an additional two carriers.

Lincoln Storage-Stashaway is the preferred location for the proposed Verizon Wireless monopole.

Landscaping will not be added to this proposed telecommunications site. VZW understands that a variance may be needed.

This tower will not meet the tower height setbacks. VZW understands that a variance may be needed.

**Applicant Information:**

Verizon Wireless (VAW), LLC  
180 Washington Valley Road  
Bedminster, New Jersey 07921  
P:(678)339-4271  
F:(678)339-8552  
E:pamelia.hoof@verizonwireless.com

Call Sign: KNLH675

Market: BTA256 - Lincoln, NE



7718 Forsyth Blvd  
St. Louis, MO 63105

314.726.2610 (t)  
314.726.1821 (f)

Verizon Wireless is proposing to install a 100-foot monopole at the rear of Big Red Storage located at 540 North 46<sup>th</sup> Street. We are requesting a tower height set-back variance and a landscaping variance.

#### **Tower Setback:**

Verizon Wireless seeks a tower-height setback since the lot is fully developed with storage units, which make any other location on the lot impractical. If the tower were relocated to another part of the lot, the tower would block access to the units by the Owner and his numerous tenants. We sited the tower adjacent to an endcap of existing shelter, which allows for traffic to flow around the tower, yet is as far from the property line as possible (approximately 35').

The neighboring uses are Zoned H-2, and consist of light industrial and commercial uses. There are no residential homes located on neighboring properties. The tower is located as close as possible to the existing storage unit. This site was selected since the land use of this parcel, as well as neighboring parcels, is compatible with a cell tower.

#### **Landscaping:**

The property owner and Verizon Wireless are seeking a variance to the landscaping design standards. The location of the tower is approximately 325 feet east of 46<sup>th</sup> street, which is such a distance that the base of the tower is concealed by storage unit building(s). The area is hidden from 46<sup>th</sup> Street and landscaping would not be visible. The owner is concerned that landscaping will cause access problems and request that we not tear up his parking lot and driveway for landscaping. The design standard is evergreen trees that grow to a height of 35 feet. This will severely impact the site and make access around the building impossible.

Since our equipment will be concealed inside an existing building, equipment area will naturally be shielded from view. Because of the negative affects of the landscaping regulations to the cell tower and the property owner, we are seeking relief from the City Council.



## Memo

**To:** Lincoln Zoning Board  
**From:** Chris Kumke  
**Date:** 4/5/2006  
**Re:** LINP Wyuka

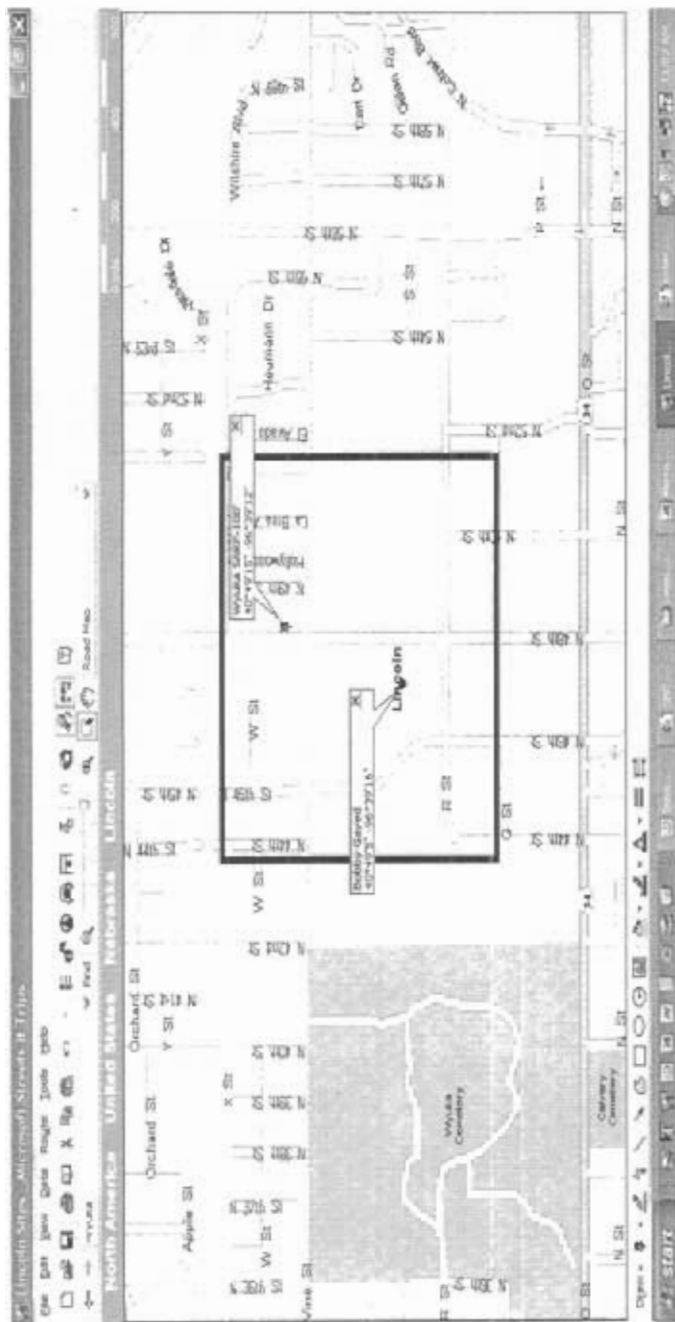
---

### **LINP Wyuka Objectives**

The main objective of the LINP Wyuka site is to provide coverage in the area that is roughly defined by 40th Street on the west, 56<sup>th</sup> Street on the east, Holdrege Street on the north, and O Street on the south. By placing the site at the proposed location, we will be able to provide better coverage to our customers, especially in the area of 48<sup>th</sup> & R that contains several large retail stores. This location is also well suited for our existing network, as it will hand off to our existing sites without having to much overlap. The tower height of 100' is needed so that we are able to mount our antennas high enough to be above existing clutter such as trees and buildings in the area. By mounting the antennas above the clutter, we significantly improve the effective footprint of the cell site. This will eliminate the need for future sites in the area to fill in coverage holes caused by signal loss due to clutter. There are several existing towers nearby the proposed tower, however none of the towers will work due to the following reasons.

- 1) US Cellular tower near 42<sup>nd</sup> & Randolph – This tower is too far to the south and is just 4 blocks away from our existing Tabitha site on top of the Tabitha building. There would be too much overlap in coverage and this location would not provide sufficient signal to our desired coverage area.
- 2) LES tower near 56<sup>th</sup> & P – This tower is on the east edge of our desired coverage area and would have too much overlap with our existing site near the Gateway Mall. With this location, the coverage on the west end of our coverage area would be very weak and would require an additional site to provide the same level of service.
- 3) Alltel tower near 48<sup>th</sup> & Y – The available antenna mounting level for this site is too low and would not allow us to be above the surrounding clutter. This would greatly reduce the footprint of the proposed site and require additional sites to provide the same level of service.
- 4) KOLN tower near 40<sup>th</sup> & Vine – This is a high power TV tower, which we cannot go on due to the effects of the high power transmissions on our equipment.
- 5) 3 Eagles Communications tower near 45<sup>th</sup> & Vine – This is a high power radio tower, which we cannot go on due to the effects of the high power transmissions on our equipment.

Chris Kumke  
Radio Frequency Engineer  
Verizon Wireless  
913-696-5973



SEASON RING



## Memo

**To:** Lincoln Zoning Board  
**From:** Chris Kumke  
**Date:** 4/12/2006  
**Re:** Propagation maps

---

### **Propagation maps**

The propagation maps that I generated for the proposed sites in Lincoln, NE show the predicted coverage or received signal strength at three separate levels.

Red shows where the predicted signal is greater than or equal to -75 dBm. This shows where the coverage will be strong enough to serve our customers inside of most buildings.

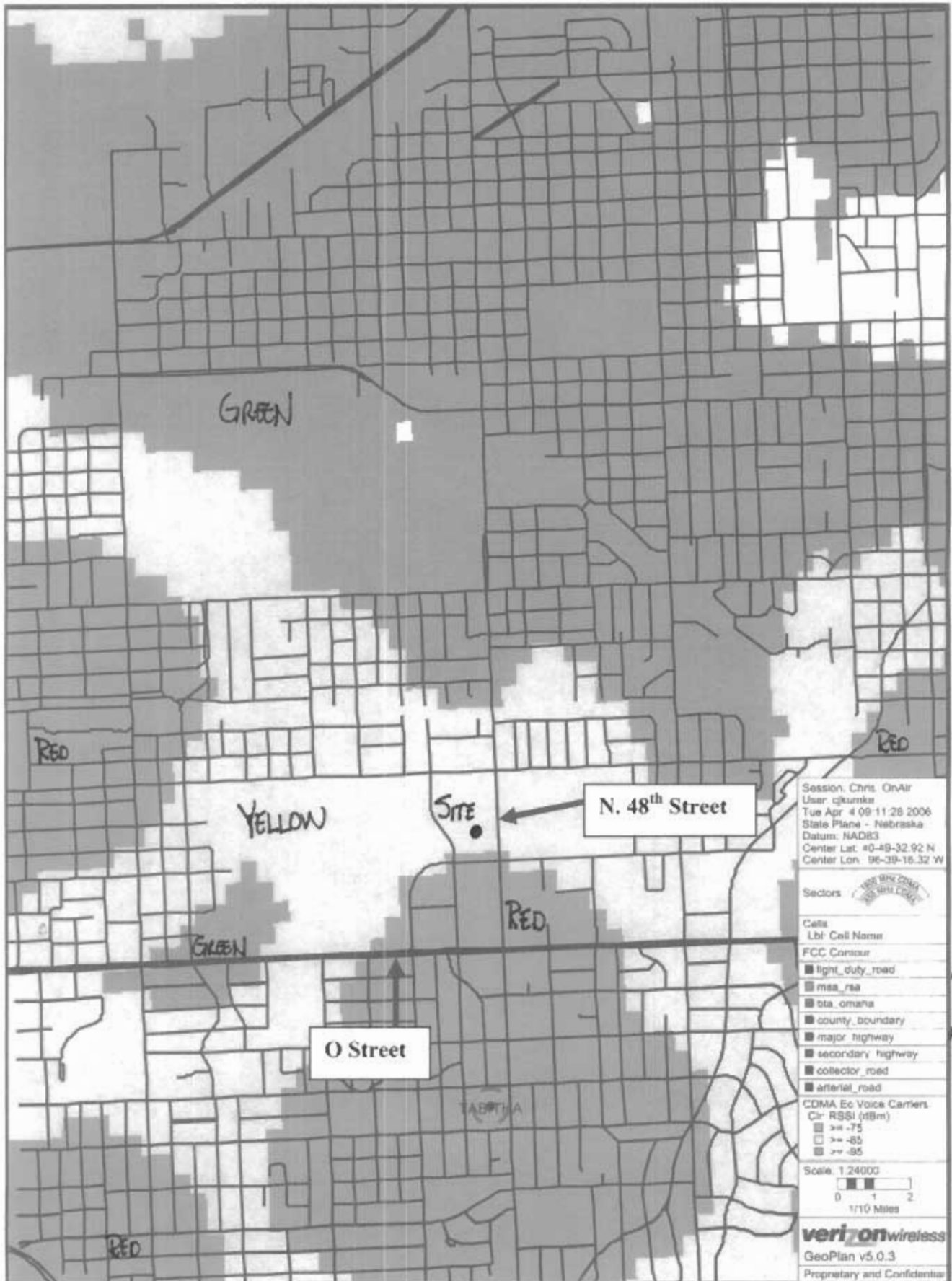
Yellow shows where the predicted signal will be less than -75 dBm but greater than or equal to -85 dBm. This shows where the coverage is strong enough to serve our customers inside their vehicles.

Green shows where the predicted signal will be less than -85 dBm but greater than or equal to -95 dBm. This shows where the coverage is strong enough to serve our customers who are standing outside.

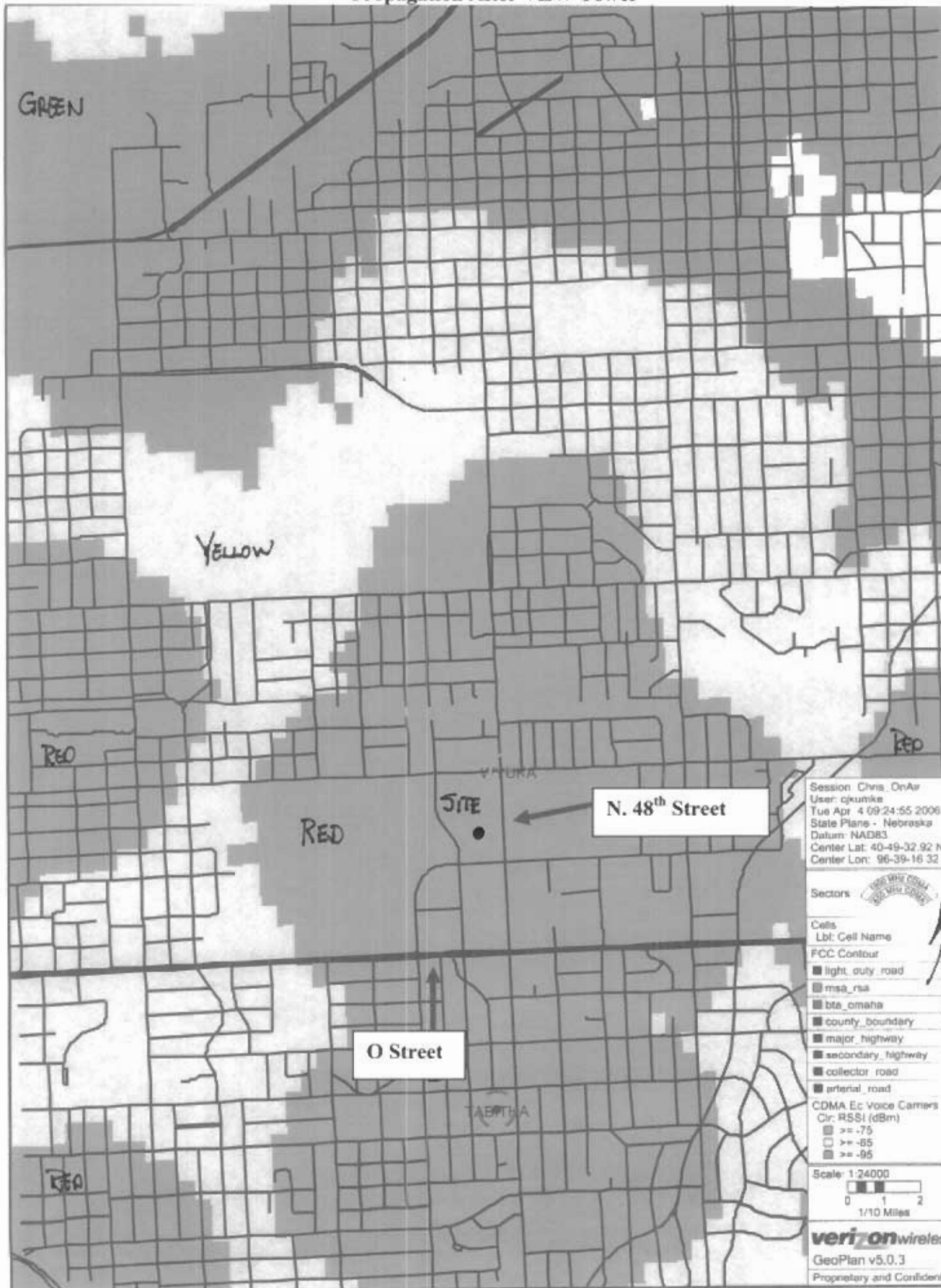
These maps are not a guarantee of coverage and may contain areas with no service. These maps show approximately where we have coverage based on our internal data. Wireless service is subject to limitations, particularly near boundaries and in remote areas. Customer equipment, cell site availability, topography and other environmental considerations also affect service, which may vary significantly within buildings.

Chris Kumke  
Radio Frequency Engineer  
Verizon Wireless  
913-696-5973

# Propagation Before VZW Tower



# Propagation After VZW Tower





**LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT  
INTER-OFFICE COMMUNICATION**

**TO:** Brian Wil      **DATE:** April 25, 2006  
**DEPARTMENT:** Planning      **FROM:** Chris Schroeder  
**ATTENTION:**      **DEPARTMENT:** Health  
**CARBONS TO:** EH File      **SUBJECT:** Wireless Tower  
EH Administration      SP #06031

The Lincoln-Lancaster County Health Department has reviewed the special permit application with the following noted:

The proposed emergency generator depicted on the site plan will be subject to complying with the Lincoln Municipal Code 8.24 Noise Control Ordinance.